SUBJECT INDEX

Abrasion 147-152 Anorthositic norite 338, 339 Absolute dating of terrains and formations 8-21 ANT suite of lunar terrae 13 Accommodation zone 363 Anticline-syncline pair 275-302 Accumulation zone 254-302 Antiroot 88 Acraman 186 Anva 534-535 Active continental margin 42 Anydrous basaltic crust 55-76 crustal spreading 396-405 Anydrous material 233 Aditi Dorsa 424-467 Aphrodite Terra 32, 42, 46-48, 87, 93, 97, Advective heat 526-529 101-123, 113-116, 131-152, 164, 300, 301, ADW 83-97 307-326, 395-405, 483-490 Aeolian process 18, 19, 127-152, 175-189 Api Mons 105, 411-419 transport 127-152 Arachnoid 101-123, 392-405, 493-529 Aranyani Chasma 269-302 Agpaite nepheline syenite 14, 15 Ahsonnutli Dorsa 424-467, 482-490 Arc shoshonitic association 330-339 Airfall deposit 243 Arcuate region 321-326 Airy isostasy 25-52, 233, 241, 243, 345-385 ridge 448-467 Akkuriva Colles 493-529 scarp 394-405 Akna 44, 96, 110-113, 193-246, 273-302, tessera 260-302 391-405 thrust 258-302 Alaskite granite 14, 15 Areal compression 105-123 Alba Patera 211 distribution 409-419 Albedo 176, 177 volcanism 105-123 pattern 152 Arecibo Observatory 116, 175-189, 198-246, strip 101-123 305-326, 343-385, 395-405, 496-529, Albite 335-339 Alkali basalt 58, 59, 72-74, 333-339 radiotelescope 129-152 gabbroid 333-339 Arsia Mons 212 gabbros 329-339 Artemis Chasma 113-116, 345, 362 olivine basalt 14, 15, 61 Ascraeus Mons 212 picrite 61 Assemblage 394-405 Allat Dorsa 509-529 Asteria Regio 315-326 Alpha Regio 42, 47, 88, 131-152, 320-326 Asthenosphere 81-97, 118-123, 129-152, Altimetric data 348-385 239-246 Altimetry 127-152, 343-385, 391-405 drag 404 Alumina basalt 66 flow 198, 251-302 Asymmetrical ridge, belt/plain 464-467 Amphibole-dolomite bearing peridotite 64 belt/tessera 464-467 Amphibole peridotite 63 Anahit Corona 411-419 Atalanta Planitia 129-152, 315-326, 394-405, Ananke 110-113 424-467, 480-490, 504-529 Tessera 509-529 Atira Mons 105, 411-419, 486-490 Atla Regio 25, 42, 47, 49, 97, 101-123, 311-326, Anastomosing ridge 421-467 Andesite 14, 15, 66, 67, 71, 74, 333-339 345-385 Angular momentum 563 Atmosphere 137, 138 parameter 561 Atmospheric action 133 Anhydrite 137, 149 weathering 351 formation 127-152 Atropos 110-113, 391-405 Annulus 200-246, 269-302, 315, 410-419, Attitude control system 559-578 Audra Planitia 269-302 422-467

Augen-shaped plain 421-467

Anorthite 335-339

Aureole 505–529 Ausra Dorsa 270–302, 421–467 Averaged measurement 560–578

Ba'het Corona 411–419
Bachue Corona 411–419
Barchan dune 152
Basal altitude 409–419
diameter 493–529
melting 37–52, 193–246
of lunar maria 13
topographic platform 493–529
topographic rise 507–529
Basalt-eclogite transition 28, 59
liquidus 37–52
petrogenesis 61

Basaltic andesite 66, 67, 74, 333–339 crust 13, 64 komatiite 61, 73 lava 18

magma 29–52 plume 88 shield volcano 519–529 style volcanism 244 Basanite 63, 74

Bedform 142–152 Bedrock 127–152, 235 Bell Regio 114–116, 309–326, 394–405 Bereghinya Planitia 118–123, 400–405, 509–529

Beta Regio 25, 42, 47, 49, 76, 87, 88, 93, 96, 97, 114–116, 129–152, 194–246, 257–302, 307–326, 346–385, 394–405, 456–467, 493–529

Bezlea Dorsa 311–326, 424–467 Bimodal hypsometric curve 40–52 hypsometry 129–152 Binning 500–529

Binning 500–529
Biotite granite 14, 15
Blocky surface 127–152
Boninite 73
Braid 441–467

Bright component 305–326 halo 235

ring crater 136 unit 350–326 Broad arch 431–467 idge 421–467

Buckling 275–302, 458–467

Calc-alkaline 330–339 silicic volcanism 72, 75 Calcite 137 Caldera 493–529 formation 105 Carapace 207 Carbonate 137 basaltic crust 55–76 solidus 63 Carbonation reaction 67 Carbonatite melt 64 Cartesian coordinate 561 Cassat Corona 411–419 Central Fortuna Syntaxis 284–302 Tessera 251–302 Centralized effusive volcanism 193–246

Character and intensity of exogenetic process 18 Chasma 261–302, 343–385, 542–557 Chemical weathering 18, 19, 175–189

Chevron tessera 270–302 Cleopatra Patera 186 Clinopyroxene 66 Clotho 110–113, 391–405

Tessera 504–529 Coatlicue Corona 411–419 Cold spot 106

Colette 193–246, 400–405 Caldera 412–419 Collis 542–557 Collision 240, 251–302

Comminuted debris 147–152 Component description 431–467

Compression 258–302, 421–467, 471–490 Compressional deformation 44, 46, 49, 51, 223, 239–246, 397–405 extensional stress 91–97

extensional stress 91–97 origin 251–302 tectonics 198–246 thickening 397–405 zone 105 Concave summit 502–529

Conductive geotherm 37–52, 69 heat loss 48

Conductivity of surface material 533–537 Cone 409–419 Continental crust 329–339

Convection cell 129, 487–490 Convective upwelling 380

Convergence 198–246, 251–302, 397–405 crustal thickening and 58–76 zone 51

Convergent boundary 75 margin 70–76

plate boundary 71–76 margin 38

Cooling rate 523–529 Corona 95, 101–123, 305–326, 394–405, 409–419, 493–529, 542–557

precursor 418 Cotton 534, 535 Crater 542–557 density 401–405 relaxation 135–152

SUBJECT INDEX

retention age 162-172 scenario 185-188 Crest volcanism 257-302 Cross-strike discontinuity 357-385 lineament 421-467 Crust cracking 471-490 lithosphere 60 mantle boundary 81-97 Crustal block 403-405 column 70-76 creation 365-385 density 81-97 anomaly 345-385 flow 251-302 formation 57-76 fracturing 471-490 generation 36 imbrication 38, 44 process 25-52 production 343-385 recycling 25-52, 74 spreading 34, 57-76, 322-326, 343-385, 393-405, 525-529 thickening 34-52, 198-246, 251-302 thickness 81-97, 518-529 variation 25-52

Dacite 71 Dacitic melt 68 Dali Chasma 311-326, 345-385 Danu 110-113, 193-246, 391-405, 421-467 Dark component 305-326 halo plain 305-326

ridge 236 unit 305-326 Daura Chasma 271-302

underplating 238-246

Cytehrean Moho 82-97

Deformation 393-405, 421-467, 475-490 Dehydration 55-76

Dekla 108-113, 391-405 Delamination 38, 39, 60-76 Demeter Corona 411-419 Dennitsa Dorsa 448-467, 480-490 Density inversion 38, 39 Depression 211-246

Derivation of primary magma 57-76

Derivative magma 59 Deuteric alteration 351

Devana Chasma 239, 311-326, 440-467 Diameter-frequency distribution 162-172

Diana Chasma 345-385 Diapir 461-467 method 118-123 plain 102-123 uplift 472-490

Diapirism 394-405 Diffuse halo 193-246 Dike in dike 472-490 Diorite 332-339

Discontinuous ridge 421-467

Disk 409-419 Disrupted terrain 232

Distortion 493-529

Distributed effusive volcanism 193-246

Distribution deformation 47, 48 Divergent boundary 343-385

plate 526-529 Dolomite 62, 63

Domal rise 47, 392-405 uplift 392-405

Dome 193-246, 409-419, 472-490 cluster 508-529

concentration 508-529 group 508-529

Dome-like hill 494-529 uplift 101-123 Dome-rise 95

Doming 257-302

Doppler measurement 566-578

Dorsum 542-557 Drag force 162 Ductile compression 107

deformation 38 thickening 39, 44 Dunite 14, 15

Dvan-Mu Dorsa 271-302

Dynamic upwelling 198

Earhart Corona 411-419

Earth 3-21

Eastern Aphrodite Terra 46, 47, 343-385 Fortuna Tessera 251-302

Ishtar Terra 42, 44, 45, 251-302 Eclogite 38, 66, 67, 69, 71, 72

facies 66

Edifice 349-385, 409-419, 513-529 Effusive shield volcano 523-529

Eisila Regio 257-302, 309-326, 346-385

Eistla Regio 113-116, 402-405

Ejecta 533-537 blanket 8

deposit 133-152

fragment 175-189

Elastic lithosphere 243, 245, 350-385 Elevation 237-246, 518-529

Endogenetic activity of Venus 3-21

Endogenic activity 121 process 137, 175-189

Ephemeris time 561

Equatorial Highlands 46-49, 51, 343-385 region 305-326

Euler's theorem 375 Eutectics of source rock 20 Excavation volume 175-189 Exogenetic process 3, 19, 20 Exogenic process 137, 175-189, 235 Exponential function 498-529 Exsolution 211, 234 Extension 398-405, 421-467, 471-490 Extensional deformation 49, 51, 376 origin 46 stress 93-97 tectonic environment 347 tectonics 518-529 tensional zone 105 External gravitation field 81-97 Extrusion 33, 35, 36, 46, 50, 68, 70, 461-467 Extrusive eruption 381 flow 522-529

Fakohotu Corona 411-419 Fan 424-467, 481-490 Fault 392-405 scarp 200-246, 349-385 Feldspar 13, 335-339 rich crust 107 Feldspathic crust 419 Felsic component 13 Felsic crust 72, 76 material 14 Fernandes 534 Feronia Corona 411-419 Ferric oxide 133 Ferrobasalt 66, 67, 68, 71, 72, 74, 75, 233, 522-529 Fissure 472-490 Flank characteristics 502-529 Flexure 400-405, 481-490 Fluctus 542-557 Flux 142-152 Fold belt 105, 251-302 Fold/thrust belt 256-302 Folding 471-490 Foredeeps 457-467 Formation of anhydrite 18 of magnetite 18 Fortuna Tessera 44, 45, 48, 96, 108-113, 241, 242, 391-405, 419, 424-467, 487-490 Fossa 542-557 Fracture zone 343-385 Fresnel reflection coefficient 129-152, 495-529,

Gabbro 66, 69 Gamma-ray spectroscopy 58

Freyja Montes 44, 96, 110-113, 131-152,

193-246, 273-302, 391-405, 421-467

Ganiki Planitia 398-405, 509-529 Ganis Chasma 311-326, 363 Garnet granulite facies 66 Gas exsolution 68 Gaussian 8-21 Geochemical bicomponent crust 13 data 329-339 type of crust material 3, 13-21 Geodynamics 81-97 Geologic unit 392-405 Geologic/tectonic setting 329–339 Geologic/morphologic unit 391-405 Geosyneline basalt 14, 15 Ghost crater 135 Gilbert distribution of impact angle 166 Global sediment budget 175-189 Goldstone Observatory 305-326, 496-529, 533-537 radiotelescope 129-152 Golubkina 534 Graben 107, 118-123, 208, 221, 231, 257-302, 322-326, 363, 381, 438-467, 472-490 Granite 332-339 crust material 13 granitogneisse 14, 15 Granodiorite 332-339 Granulite 38, 66, 69 Gravitational condenser 86 downslope movement 18, 19 relaxation 256-302, 393-405, 412-419 Gravity anomaly 321-326, 526-529 constant 563 sliding 47, 393-405 spreading 251-302 Green's function 84, 85-97 Greenhouse effect 121 Greenstone belt 76 Grid 363-385 Groove 193-246, 393-405, 423-467 Grooved plains 226-246 Ground trajectory measurement 560-578 GS analysis 329-339 Guinevere Planitia 87, 131-152, 244, 311-326, 395-405, 493-529 Gula Mons 211, 311-326, 349

Hagfors law 160, 495–529 Halo 506–529, 533–537 Hathor Mons 211 Heat flow 49, 52, 164, 493–529 pipe mechanism 33, 35 transport 518–529 Hecate Chasma 116, 311–326, 363 Heng-o Chasma 315–326 Hestia Rupes 115–116 High resolution image 391–405 High-potassic alkaline basalt 329–339 High-Ti and high-K mare basalt 14, 15 Highland 316–326 Hina Chasma 261–302 Horizontal compression 47, 256–302 convergence 38, 39, 240, 251–302 or lateral crustal growth 28–52 Hot mantle plume 82–97 Hot spot 4, 33–36, 44, 47, 48, 57–76, 323–326,

379, 393–405, 409–419, 524–529 effect 29–52 Hot upwelling plume 86

Hot upwelling plume 86 Hummocky plain 102–123, 513–529 Hydrate basaltic crust 55–76 Hypsogram 16, 17, 39 Hypsometric curve 14, 15, 25–52, 129–152

Igneous rock 332–339 Ilmenite 151 Imagery geometry 159–172 Imbrication 240, 251–302, 404, 458–467, 471–490

Impact crater 19, 127–152, 159–172, 175–189, 392–405, 533–537 statistics 499–529 creep 139–152 derived sediment 175–189 flux 127–152, 178–189 Incidence angle 159–172, 305–326, 523–527

Incidence angle 159–172, 305–326, 523–527 Indira 534 Innini Mons 211

Inter-highland tectonic zone 305–326 Intermediate alkaline 332–339 sized hill 513–529

unit 305–326
Intersecting ridge 251–302
Intra-crustal diapirism 105
Intrusion 33, 35, 36, 46, 50, 5

Intrusion 33, 35, 36, 46, 50, 51, 68, 70, 384 Iris Dorsa 448–467

Iron-wustite buffer 64
Ishtar Terra 38, 40, 43, 46–49, 64, 66, 87, 88, 93, 96, 97, 101–123, 108–113, 129–152, 193–246, 394–405, 414–419, 483–490,

512–529 Island arc 70–76 Isostatic effect 34 elevation 39 equilibrium 96 topography 40

Itzpapalotl 110-113, 276-302, 391-405 Ivka 534

Julian date 561

K-U-Th concentration 329–339 systematics 13 K-U systematics 15
Kamari Dorsa 421–467, 487–490
Kara-Ust Kara 186
Keplerian equation 565
Kimberlite 63, 64, 74
Kinematic parameter 565–578
Klenova crater 179, 186, 187
Komatiite 60, 74, 75
KREEP component 13
Kurukulla Mons 411–419
Kutue Tessera 110–113, 314–326, 509–529

La Fayette 534, 535
Lachesis Tessera 510–529
Lada Terra 88, 93, 97
Lagrange form 562
Laima 107–123, 391–405, 419
Regio 42
Tessera 241, 242, 251–302, 424–467, 487–490
Lakshmi Planum 44, 96, 101–123, 131–152, 172, 193–246, 251–302, 392–405, 412–419, 421–467, 478–490
Laplace plane 561

421–467, 478–490
Laplace plane 561
Laplace vector component 561
Lasdona Chasma 269–302
Lateral crustal evolution 395–405
deformation 513–529
Lauma Dorsa 398–405, 424–467, 477–490
Lava rheology 207

Leda Planitia 400–405 Leucititic 330–339 Light pressure 560–578 Lind 534 Linea 542–557

Lineament 284–302, 473–490 Linear discontinuity 343–385 orogenic belt 49 tectonic dislocation 480–490

trend 353–385 Liquid water 19 Liquidus 60–76 Lise Meitner 186 Lithosphere 137, 138 Lithospheric delamination 238–246

thickness variation 27–52 Lobate flow 200–246, 258–302, 513–529 pattern 311–326

LOS gravity 347–385 Loukha Planitia 504–529 Low shield volcano 493–529 Lowland 316–326

Ludmilla 222 Lukelong Dorsa 421–467, 479–490 Lunar granite 14, 15

maria 28–52, 75 regolith 175 Maat Mons 323-326, 345, 351 Mafic group 312, 329-339 Magda 222 Magellan 175-189, 208-246, 251-302, 329-339, 402-405 imagery 4-21 mission 3, 101-123, 419, 421-467, 471-490, 493-529, 541-558, 559-578 space probe 159-172 spacecraft 3, 129-152 Magma chamber drainage 243, 245 intrusion 471-490 ocean 74, 76 source 209 Magmatic accretion 102 differentiation 58-76 Magnesite 62, 63 bearing peridotite 74 Major shield 409-419 Manicouagan 186 Mann-Whitney criterion 413-419 Mantle convection 82-97, 121, 526-529 derived magma 330-339 downwelling 240 flow 107, 239 hot spot 101-123 isotherm 60 plume 48, 57-76, 238, 286-302 temperature 343-385 thermal anomaly 323-326 upwelling 256-302, 343-385 wedge 55-76 Manto Fossae 269-302 Mare basalt with Ti and K 14, 15 Margit 534 Mars 13, 119-123, 139-152, 175-189, 195, 231, 421-467, 475-490, 494-529 Mars-5 data 14 Mascon 106, 339 Maslenitsa Corona 411-419 Massmin 339 Matic alkaline 333-339 Maxwell Montes 44, 96, 110-113, 129-152, 193-246, 251-302, 391-405, 453-467, 483-490 Mechanical abrasion 175-189 lithosphere 59 Mechanism of lithospheric heat transfer 26 Melasyenite 334-339 Melia Mons 105, 411-419

Melt product 33

Meni 108, 391-405

Melting of crustal material 38, 57-76

of differentiate 58-76

of mantle material 58-76

or density inversion 37

Mercury 13, 421-467, 475-490 Meshkenet Tessera 108-113, 270-302, 500-529 Meteoroid 162 Methane 72 Metis Regio 114-116, 397-405, 480-490 Metis-Bell uplift 105 Meymechite ijolite 14, 15 Miaskite nepheline syenite 14, 15 Microdune 145-152 Mirror effect 160 Missing crater 185 crust 26-52 Mnemosyne Regio 413-419 Moho amplitude 88-97 boundary 86-97 calculation 96 deviation 86-97 interface 86-97 level 86-97 relief 81-97 undulation 88-97 Moira Tessera 258-302 Mokosha Montes 411-419, 486-490 Monica 534 Mons 542-557 Moon 421-467, 475-490 Morana Chasma 261-302 Morphology 353-385 Morphostratigraphic unit 234 Mottled bright unit 305-326 dark unit 305-326 plains unit 493-529 Mountain belt 392-405 Multiring impact crater 186-189 Multitessera 107 Narrow-spaced ridge 441-467 Natural convection 523-529 Nearest neighbor technique 412-419 Nefertiti 315-326

Corona 411-419 Negative buoyancy 50 density anomaly 85 diapirism 38, 243, 245 Nephele Dorsa 421-467 Nepheline normative alkali olivine basalt 62 normative basaltic melt 64 normative melt 61, 62 syenite 332-339 Newton's generalized tangent 567 Newtonian rheology 280 Neyterkob Corona 411-419 Nightingale Corona 115-116, 411-419 Niobe Planitia 493-529 Nomenclature 541-558 Non-basaltic volcanic activity 18

Normal tessera region 269–302 Normative olivine 61

Northern Fortuna Tessera 251-302

Oblateness of Venus gravity 559-578

Offset 356–385

Olivine melilitite 64

Olivine gabbro-norite 351

normative melt 62

rich basaltic rock 351 tholeiite 61, 62, 73

basalt 74

Olympus Mons 212, 243

Onatah Corona 411-419

Ops Corona 411-419

Orbit determination 559–578

Orogenic belt 39, 44–52, 58–76, 193–246, 254–302, 394–405, 448–467, 471–490, 518–529

Orthoclase 335–339

Osculating element of satellite orbit 559–578

Otau Corona 411–419

Ovda Regio 25, 34, 46, 47, 49, 93, 96, 97, 114–116, 320–326, 346

Ovoid 392-405

Oxidation of olivine 18

Oxide composition 329–339

Ozza Mons 311–326, 345

Paired ridge 421-467

Pandrosa 424-467

Dorsa 421–467, 476–490 Parallel ridge 431–467

Parga belt 116

Chasma 311–326

Parquet 256-302, 422-467 or tessera terrain 133

Particle speed 142–152

Passive continental margin 42

deformation 396-405 Patera 193-246, 542-557

Pavlova 324, 325

Peridotite 63, 67, 71, 73, 74 mantle 59–76

Peridotitic komatiite 61

Peripheral deformation 48

Permittivity 127–152 Perturbation function 563

Petrogenesis 57–76 Phobos-2 data 14

Phoebe Regio 42, 93, 131–152, 311–326

Phonolite 71, 72

Physiographic province 305–326

Picrite 62, 72 Picritic basalt 75, 351

Pillow lava 523-529

Pioneer-Venus 127–152, 198–246, 254–302, 305–326, 347–385, 391–405, 424–467,

505-529, 559-578

mission 541–558 spacecraft 57–76, 81–97

Plagioclase 18

Plain 101-123

Plains assemblage 391–405, 422–467, 511–529 unit 221–246

volcanism 57-76, 101-123

Plains-corona assemblage 391–405, 428–467, 511–529

Plains-corona-tessera assemblage 391–405, 428–467, 511–529

Plains-ridge belt assemblage 391–405

Planation effect 40 Planetary crust 75

radius 41–52

Planform 498–529 Planitia 542–557

Planum 542–557

Plastic shortening and thickening 281–302

Plate tectonic process 4, 8, 33, 40

Platelet 287-302

Plume 257–302, 323–326, 379, 401–405

decay 48 head 73–76

plateau 48-52, 286-302

Poisson distribution 412–419

Polygonal outline 244 Pomona Corona 411–419

Popigai 186, 188

Positive gravity anomaly 85 Potassic basalt 329–339

Potassium 13, 351

Power law function 498–529

Prairie meteor network 166 Primary crust 28–52, 75

liquid 60

magma 59, 68, 74 melt 58

Pristine highland rock, Mg-series 14, 15

Progressive stage 409–419 Projectile deformation 165

Pyrite 151

Pyroclastic deposit 211, 214

eruption 68 volcanism 193–246, 523–529

Pyrolite 62, 63 Pyroxene 335–339

Quartz monzodiorite 334–339 monzonite 334–339 tholeiite 61, 74

Radar backscatter 493-529

bright crater 533-537	Rift-like central chasma 343-385
feature 393–405	Rifting 47, 251–302
surface 493–529	Rim crest diameter 175–189
brightness 305–326	Ring grabens 106
dark feature 393-405	Rita 222
image 305–326	RMS slope 305–326
data 348–385	and reflectivity mapping 347-385, 507-529
mapping satellite 559–578	Robot technique of isotopic absolute dating 13
unit 305–326	Rolling plain 139–152, 316–326, 339
Radar-bright ejecta deposit 235	Rose diagram 231
halo 175–189	Rotation force 8
halo 127–152	Rudneva 534, 535
lineament 349–385	Runi Corona 411–419
Radarclinometry 502–529	Rupes 542–557
Radial compression 240	Rusalka Planitia 345, 351, 357
velocity 568–578	Ruslanova 534
Rananeida Corona 411–419	
Rangrid Fossae 218, 232, 237	Sacajawea 193-246, 400-405
Recycling 329–339	Caldera 412–419
Reflectivity 305–326, 431–467, 495–529	Saltation 138–152
Regio 542–557	Sapas Mons 345
Region zero's topogaphy 95	Sappho Mons 211, 212, 315–326, 349
Regional structure 353–385	SAR imaging 347–385, 495–529
Regressive stage 409–419	Scarp 251–302, 321–326
Relative stratigraphy 8	Scattering 305–326
Relief 129, 260–302, 314–326	Sea-floor spreading 47
Remobilization of crustal material 38	Secondary crust 28–52, 75
Renpet Montes 105, 411-419, 486-490	Sediment accumulation 175–189
Resurfacing 127-152, 175-189, 235, 240-246,	Sedimentary cycle 175–189
412–419, 513–529	Sedna 244
rate 25-52	Sedna Planitia 87, 504–529
Rhea Mons 257–302, 322–326	Sekmet Montes 409-419, 486-490
Rheological characteristic 27	Sel-Anya Dorsa 271–302
Rhombic cell 483–490	Semuni Dorsa 261–302, 424–467
Rhomboidal perimeter 227	Sequential crustal imbrication 277–302
Rhyolite 71	Shear 421–467
Ridge 193–246, 393–405	deformation 251–302
belt 95, 101-123, 254-302, 315-326,	Shield 193–246
391–405, 421–467, 471–490, 494–529	volcano 102-123, 193-246
age 428-467	Shielding effect 160–172, 178–189
characteristics 431–467	Shift 356–385
classification 429-467	Shimti 110-113
distribution 423-467	Tessera 311–326, 509–529
fan 483–490	Shoshonite 13, 332–339
origin 471–490	Sialic composition 39
plains fan assemblage 424-467	crust 40
tessera assemblage 423-467	Siddons 222
trough 464-467	Sif Mons 211, 257–302, 311–326
crest 343-385	Silica-rich magma 75
length 33	Silicate melt 60–76
Ridge-and-band plain 133	C
Ridge-and-trough form 343-385	Silicic calc-alkaline 332–339
	magma 66
Ridged terrain 193–246	
Ridged terrain 193–246 Rift 423–467	magma 66
	magma 66 Simatic crust 39

characteristics 502-529 Small dome 493-529 Smooth plains unit 244 Snegurochka Planitia 111-113, 241, 256-302, 509-529 Soft ductile plate 101-123 Solar radation pressure 563 Solidified basaltic lava flow 393-405 Solidus 60-76 Source vent 244 Spaceborne radioaltimeter 572-578 Spall 181 Spherical harmonics 81–97 Spike 135 Spin-change 362 Spreading center 60, 70-76 rate 373-385 zone 82-97, 485-490 Stacking 251-302 Strewn field 162 Striation 507-529 Strike-slip fault 275-302, 423-467, 477-490 Structure of Venus' interior and seismicity 20 Subducted crust 59 Subduction 30, 32-52, 65, 71, 72, 74, 76, 240, 471-490 trough 15 zone 42, 82-97 Subparallel ridge and groove terrain 134 Sudbury 186 Sulfate 137 Sulfide 137 Sulfur content 351, 362 Summit pit 493-529 vent 193-246 Sun gravity effect 559-578 radius vector 563-578 Supercorona 95, 101-123 Surface chemistry data 347-385 creep 138-152 evolution 518-529 roughness 431-467, 495-529 Suspension 138-152 Suture zone 271-302 Syenite 13, 75, 332-339 Symmetrical ridge belt 463-467

Tangential stress 89–97 Tatyana 534 Tectonic deformation 251–302 evolution 101–123, 251–302 junction 305–326, 363 lineament 507–529 process 150

Synphase point 567

Syrtis Major 211

scheme 101-123 structure 81-97, 392-405 style 471-490 volcanic environment 409-419 Tectonically segmented linear highland 305-326 Tectonism 127-152, 493-529 Tefnut Mons 211 Tellus 47, 108-113, 391-405, 419 Regio 42, 48, 311-326, 424-467, 488-490 Tepev Mons 211, 311-326, 411-419 Terra 542-557 crust 339 Terrain characteristics 511-529 Terrane accretion 251, 293-302 Terrestrial continental crust 31-52 oceanic crust 28-52 Tertiary crust 28-52 Tessera 8-21, 25-52, 95, 101-123, 193-246, 256-302, 313-326, 339, 393-405, 418, 419, 421-467, 494-529, 542-557 block 254-302 mountain belt assemblage 391-405 paleocontinent 105-123 ridge belt assemblage 391-405 terrain 47, 64, 127-152, 391-405 Tethus Regio 42, 47, 88, 93, 97, 221, 399-405, 413-419, 499-529 Texture 305-326 Tharsis Plateau 195 Theia Mons 211, 257-302, 311-326, 349 Thermal anomaly 393-405, 410-419, 523-529 boundary layer 343-385 contribution 47 flux 522-529 gradient 28, 33 gravitational sliding 251-302 loss 523-529 uplift 193-246 Thetis Regio 25, 34, 47, 49, 88, 93, 97, 114-116, 315-326, 345-385, 493-529 Tholeiite 74, 66-76, 522-529 basalt 14, 15, 59-76, 329-339 Tholus 542-557 Thorium 351 Thrust fault 449-467, 471-490 sheet 275-302 Tonalite 72 Tonalitic magma 68 Topographic slope 495-529 Topography 343-385 Torus 409-419 Trachyte 71, 72 Track 526-529 Traction 139-152

Transform fault 343-385, 473-490

Transversal fault 477-490

geology 3

Trap and plateau-basalt of platform 14, 15
Trending ridge 251–302, 410–419
trough 251–302
Troctolite 338, 339
Trondhjemite 66, 67, 74
Trough 95, 394–405, 421–467, 479–490
and ridge terrain 285–302
mountain belt 464–467
Truncated ridge 361–385
Truncated trend 361–385
Tuff 329–339, 486–490
Tusholi Corona 411–419
Tycho 537

U-Th systematics of planetary and mateorite material 14 Ulfrun Chasma 363 Regio 113-123, 315-326, 394-405, 424-467 Ultra-hot diapir 76 Ultramafic rock 14 15 Underplating 33, 35, 36, 46, 50, 59 Underthrusting 38, 44, 65, 70, 76, 193-246, 251-302, 400-405, 421-467 Undivided plain 221-246, 305-326 Uni Dorsa 509-529 Unimodal hypsometric curve 49, 51 Unnamed Dorsa # 2 271-302 Uorsar Rupes 111-113, 241 Upland plateau 305-326 rise 305-326 Uplifting 409-419 **Upwelling 239** mantle flow 96 Uranium 351 Ushas Mons 211, 212

VAS parameter 559-578 radius vector 563-578 Vedma Dorsa 421-467, 484-490 Vega 329-339 Vega 1/2 14 Mission 127-152 Vellamo Planitia 398-405 Velocity vector component 564 Veneer 149, 150, 176, 188 Venera 15/16 8-10, 13-15, 19, 81-97, 114-123 radar imagery 3-21 lander 57-76, 127-152, 159-172, 175-189, 198-246, 254-302, 305-326, 329-339, 391-405, 409-419, 421-467, 471-490, 493-529, 533-537 spacecraft 559-578 Venilia Montes 409-419, 486-490 Vent complex 193-246 Ventifact 147

Venus crust 31-52

hypsometric curve 40-52 Wind Tunnel 139-152 Venusian atmosphere 10 basaltic composition 25-52 convection 81-97 dome-like uplift 15, 16 lithosphere 118-123 Moho 81-97 Vertical crust growth 33-52 evolution 395-405 formation 395-405 recycling 34-52 deformation 423-467, 511-529 recycling 35-52, 70 tectonics 410-419, 518-529 uplift 47 Very bright unit 305-326 dark unit 305-326 Vesiculation 68 Vesta Rupes 131-152, 193-246 Viscous relaxation of crater relief 28, 36 Volcanic aeolian nature 19 caldera 199-246 center 493-529 construct 493-529 edific 57-76, 193-246, 395-405 flux 35-52 resurfacing 39 rate 35, 36 source vent 395-405 tectonic process 19, 20 uplift 485-490 Volcanism 47, 127-152 Volcano 391-405 Volume 502-529 Vredefort 186

Weakened uplifted planetary belt 101–123
Weathering 127–152, 207, 208
Weibull distribution 181, 182
Western Aphrodite Terra 33, 46, 47, 76, 343–385
Fortuna Tessera 44, 251–302
Ishtar Terra 25, 42, 44, 49, 76
Widely-spaced ridge 441–467
Wind entrainment 127–152
Wind streak 152
Windblown particle 137–152
Wrinkle ridge 423–467, 472–490

XRF analysis 329-339

Zero's shear modulus 84–97 Zlata 222

AUTHOR INDEX

(Volume 50/51)

Akim, E. L. 559
Arvidson, R. E. 127
Aubele, J. C. 493
Basilevsky, A.T. 3, 409
Burba, G. A. 541
Crumpler, L. S. 343
Frank, S. L. 421
Garvin, J. B. 175
Greeley, R. 127
Head, J. W. 25, 57, 193, 251, 391, 421
Hess, P.C. 57
Ivanov, B. A. 159
Ivanov, M. A. 409
Krivtsov, A. P. 533

Kryuchkov, V. P. 471

Marchenkov, K. I. 81 Nikishin, A. M. 81, 101 Nikolayeva, O. V. 329 Roberts, K. M. 193 Rzhiga, O. N. 533 Senske, D. A. 305 Sidorenko, A. I. 533 Sinilo, V. P. 533 Slyuta, E. N. 493 Stepan'yants, V. A. 559 Tuchin, A. G. 559 Vlasova, Z. P. 559 Vorder Bruegge, R. W. 251 Zakharov, A. I. 533 Zharkov, V. N. 81